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5/8/02

METHOD OF SIMULTANEOUS DETECTION OF BASE
CHANGES (SDBC) IN EXPRESSED GENES

ABSTRACT

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This invention is directed to a method for detecting base changes in a nucleic acid of interest which comprise the following steps: (a) contacting the nucleic acid of interest with a suitable reference nucleic acid under suitable conditions that the nucleic acid of interest forms a heteroduplex with the reference nucleic acid; (b) contacting the heteroduplex with a combination of suitable nucleases so as to selectively cleave the heteroduplex if a base change(s) is present; (c) ligating a detectable probe to the cleaved heteroduplex; and (d) detecting the ligated probe under suitable conditions so as to determine the location and the sequence of the base changes. The invention also includes kits for practicing the method. Also included are methods of identifying polymorphisms associated with particular cancers.

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